Registration No 87655-3 Vol. 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Robert Hawk
Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

MAY 0 9 2013

Subject: Storage Stability and Corrosion Characteristics Studies
Product Name: Fomesafen 1.88 Herbicide
EPA Registration Number: 87655-3
Submission Date: April 27, 2012
Decision Number: 466757

Dear Mr. Hawk,

The Agency has reviewed the Storage Stability (830.6317) and the Corrosion Characteristics Studies (830.6320) submitted as required for the product referenced above. It has been determined that the studies are acceptable to support the registration of this product. A complete copy of the review has been included with this letter for your information.

If you have any questions, please contact Emily Hartman of my staff at (703) 347-0189 or hartman.emily@epa.gov.

Sincerely,

Kathryn Montague, Product Manager 23
Herbicide Branch
Registration Division
Office of Pesticide Programs

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

DATE OUT: April 29, 2013

SUBJECT: **STORAGE STABILITY (830.6317) & CORROSION CHARACTERISTICS (830.6320) REVIEW**
ACCELERATED STUDY [ ]; ONE YEAR STUDY [X];
OVER 1 YEAR STUDY [ ]
MP [ ] EP [X] EUP [ ]
DP BARCODE No.: 403351 **REG. No.:** 87655-3 **FILE SYMBOL No.:**
DECISION No.: 466759 **MRID No(s):** 488219-01
PRODUCT NAME: FOMESAFEN 2 SL HERBICIDE
COMPANY: ORION FOMES, LCC

Linda Mascall 4/30/13

FROM: Linda Mascall / Shyam Mathur
Product Chemistry Team
Technical Review Branch/**RD (7505P)**

SM 4/30/13
See 87655-2
should be 87655-3

TO: Emily Hartman / Kathryn Montague, RM 23
Herbicide Branch / RD **(7505P)**

Entered under wrong reg #

I. CONCLUSIONS:

STORAGE STABILITY (830.6317):
[X] ACCEPTABLE
[ ] UNACCEPTABLE*
[ ] UPGRADEABLE*

40CFR158.190 DATA REQUIREMENT: [X] SATISFIED [ ] NOT SATISFIED

CORROSION CHRACTERISTICS (830.6320):
[X] ACCEPTABLE
[ ] UNACCEPTABLE*
[ ] UPGRADEABLE*

40CFR158.190 DATA REQUIREMENT: [X] SATISFIED [ ] NOT SATISFIED

* If unacceptable or upgradeable describe the deficiency and provide recommendations

Comments & Recommendations:

The final appearance of the sample jug was identical to that of the Control. Both were white inside and out. Neither showed any evidence of softening, cracking, crazing, deformation, or any other damage to the plastic. The closures were intact.

II. STUDY SUMMARY

A. STUDY CONDUCTED UNDER US GLP/OECD GUIDELINES

[X] Yes
[ ] No

B. PRODUCT INFORMATION

Active ingredient(s): Sodium salt of fomesafen
Label claim(s) Nominal concentration(s) (%): 22.8
Initial concentration(s) of the AI(s) (%) used in the study: 21.7
Lower certified limits (%) based on AI % in the study: 21.05

C. EXPERIMENTAL PARAMETERS

Temperature: [ ] Freezer; Room [ ]; Warehouse [ ]; 54°C [ ]; Other [X]
Humidity: Indicate % (if provided)
Duration of study: [X] 1 year; [ ] over 1 year
Type of container: [ ] Glass; [ ] Metal; [X] HDPE; [ ] Fluorinated HDPE; [ ] Other
Analysis at intervals: [ ] 0 (initial);
[X] 3 months; [X] 6 months
[X] 9 months; [X] 12 months
[ ] Over 12 months

D. ANALYTICAL METHOD

Method	DETECTOR
Gas chromatography (GC)	☐ FID (Flame Ionization Detector) ☐ ECD (Electron Capture Detector) ☐ N/P (Nitrogen/Phosphorous Detector) ☐ Other
Capillary Gas chromatography (CGC)	☐ FID (Flame Ionization Detector) ☐ ECD (Electron Capture Detector) ☐ N/P (Nitrogen/Phosphorous Detector) ☐ Other
High Pressure Liquid chromatography (HPLC)	√ UV/VIS (nm) - 290 nm ☐ RI (Refractive Index) ☐ Other
GC-MS / LC-MS	Specify
Other	Specify

E. RESULTS

Interval	% w/w Fomesafen Sodium Salt
Initial	21.7
3 Months	21.6
6 Months	21.4
9 Months	22.2
12 Months	21.8

Print Form

Please read instructions on reverse before co[illegible] ting form. Form Appro[illegible] OMB No. 2070-0060, Approval expires 2-28-

EPA

United Stetee
Environmental Protection Agency
Washington, DC 20460

[X] **Registration**
[ ] **Amendment**
[ ] **Other**

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
87655-3	K. Montague	[ ] None [X] Restricted
4. Company/Product (Name)	**PM#**	
Fomesafen 1.88 Herbicide	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

[X] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter dated _____
[ ] Notification - Explain below.
[ ] Final printed labels in reponse to Agency letter dated _____
[ ] "Me Too" Applicetion.
[X] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of storage stability and corrosion report as required by Notice of Pesticide Registration dated 6/27/2011.

Section - III

1. Meteriel This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes [X] No	[ ] Yes [X] No	[ ] Yes [ ] No	[ ] Metal [X] Plastic [ ] Glass [ ] Paper [ ] Other (Specify)
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[X] Label [ ] Container	2.5 gal	[ ] On Label [X] On Labeling accompaning product

6. Manner in Which Label is Affixed to Product [ ] Lithograph [ ] Paper glued [ ] Stenciled [X] Other plastic sleeve

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Robert Hawk	Agent	928-342-3489

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

3. Date Application Received (Stamped)

2. Signature	3. Title	4. Typed Name	5. Date
Robert Hawk	Agent	Robert Hawk	4/24/2012

April 27, 2012

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 1.88 Herbicide (87655-3); Submission of Data

The Notice of Pesticide Registration dated September 8, 2011 required the submission of a one-year storage stability and corrosion study (830.6317 and 830.6320). Orion Fomes, LLC is pleased to submit this report now. Please find enclosed Form 8570-1, three copies of the report and a Data Transmittal Document.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

DATA TRANSMITTAL DOCUMENT

Name and Address of Submitter
Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

Regulatory Action in Support of Which This Package is Submitted
Fomesafen 1.88 Herbicide, EPA Reg. No. 87655-3
Submission of Storage Stability/Corrosion Study

Transmittal Date
April 27, 2012

Submitted Study (3 Copies)

48821901 J. Zitomer, "Fomesafen Sodium Salt 22.1%, Group B: Physical Properties Test Guidelines – Preliminary Analysis, Chemical Stability and Container Corrosion," Report R11-3 (April 4, 2012), 20 pages, OPPTS 830.6317 and 830.6320

Company Official: Robert Hawk, Agent Signature: Robert Hawk
Company Name: Orion Fomes, LLC
Company Contact: Robert Hawk
rhawk@solerasd.com
telephone (928) 942-3489

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

May 21, 2012

SOURCE DYNAMICS LLC
ORION FOMES, LLC
12230 EAST DEL NORTE
YUMA, AZ 85367-7355

Report of Analysis for Compliance with PR Notice 11-3

Thank you for your submittal of 07-MAY-12. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

We are unable to accept your data submittal for further processing and review, because of the significant deficiencies noted below. It is being returned to you for correction. If deficiencies were found which apply to your overall submission, they are described immediately following this paragraph. If problems are found with individual studies, they are described below linked to the study identifier found on the enclosed copy of your bibliography.

48821901

* The following page(s) in this study is/are illegibledue to the poor quality of the photocopying: 13.

Material Sent for Data Extraction

Reg. # 87655-3

Description: Notification

☑ Material(s) Sent to Data Extraction Contractors:

- ☐ New Stamped Label Dated _____
- ☑ Notification Dated Stamped 11-26-12
- ☐ New CSF(s) Dated _____
- ☐ Other: _____

☑ Decision #: 472250

☐ Other Action/Comments: _____

_____

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: Emily Hartman

Phone: 703-347-0189 Division: RD/HB

Date: 11-27-12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Robert Hawk
Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

NOV 26 2012

Subject: Label Notification per PRN 98-10
Product Name: Fomesafen 1.88 Herbicide
EPA Reg. No. 87655-3
Application Dated: September 6, 2012

Dear Mr. Hawk,

The Agency is in receipt of your application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for Fomesafen 1.88 Herbicide (EPA Reg. No. 87655-3) dated September 6, 2012. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please contact Emily Hartman of my staff at (703) 347-0189 or hartman.emily@epa.gov.

Sincerely,

Beth Benbow

for Kathryn V. Montague, Project Manager 23
Herbicide Division
Registration Division
Office of Pesticide Programs

September 6, 2012

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 1.88 Herbicide (87655-3): Notification

Orion Fomes, LLC wishes to notify the Agency of a revised label. The only differences between the enclosed label and the final label dated September 15, 2011 are that the maps and text on page 8 have been revised to include most of the State of Florida in Region 1.

Please find enclosed five copies of the revised label and Form 8570-1.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Section 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC
telephone (928) 942-3489

Print Form

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060. Approval expires 2-28-

United States
Environmental Protection Agency
Washington, DC 20460

[ ] Registration
[ ] Amendment
[X] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
87655-3	K. Montague	[ ] None [X] Restricted
4. Company/Product (Name)	**PM#**	
Fomesafen 1.88 Herbicide	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

[X] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter dated _____
[X] Notification - Explain below.
[ ] Final printed labels in repsonse to Agency letter dated _____
[ ] "Me Too" Application.
[ ] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of revising advisory statement: Region 1 expanded to include most of Florida. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula ....

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes [X] No	[ ] Yes [X] No	[ ] Yes [ ] No	[ ] Metal [X] Plastic [ ] Glass [ ] Paper [ ] Other (Specify)
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

Text

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[X] Label [ ] Container	2.5 gal	[ ] On Label [X] On Labeling accompaning product

6. Manner in Which Label is Affixed to Product [ ] Lithograph [ ] Paper glued [ ] Stenciled [X] Other plastic sleeve

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Robert Hawk	Agent	928-342-3489

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title
Robert Hawk	Agent
4. Typed Name	**5. Date**
Robert Hawk	Sept. 6, 2012

Orion Fomes label Sept. 6, 2012

FOMESAFEN 1.88 HERBICIDE

For control of weeds in soybeans

GROUP 14 HERBICIDE

ACTIVE INGREDIENT
Sodium salt of
fomesafen [5-[2-chloro-4-trifluoromethyl)phenoxy]-*N*-(methylsulfonyl)-2-nitrobenzamide].....22.1%
OTHER INGREDIENTS:.....77.9%
TOTAL..... **100.0%**

Equivalent to 21.0% fomesafen or 1.88 pounds per gallon fomesafen

KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO

Si usted no entiende la etiqueta, busque al alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See Additional Precautionary Statements and Directions for Use on label.

FIRST AID

IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

For MEDICAL Emergencies 24 Hours a Day Call a Poison Control Center at 1-800-222-1222.
For CHEMICAL Emergency Assistance (Spill, Fire or Accident) Call ChemTrec at 1-800-424-9300
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277
Tel. 480-218-4289

EPA Reg. No. 87555-3
EPA Est. No.
Net Contents: 2.5 gal

NOTIFICATION

NOV 26 2012

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING/AVISO

This product contains fomesafen, which has been determined to cause tumors in laboratory mice. Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label.

CAUSES SKIN IRRITATION. HARMFUL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. Causes moderate eye irritation. Do not get on skin or on clothing. Avoid contact with eyes. Prolonged or repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when cleaning equipment, mixing or loading

In addition, for aerial applications mixers and loaders handling more than 150 gallons of Fomesafen 1.88 Herbicide in any single workday must wear:

- Dust/mist filtering NIOSH-approved respirator with any N, R, P or HE filter.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove and wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters. Do not apply when weather conditions favor drift from target area.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton.
- Chemical-resistant footwear plus socks

INFORMATION

Read all label directions before using.

Fomesafen 1.88 Herbicide is a selective herbicide which may be applied preplant, preemergence or postemergence for control or partial control of broadleaf weeds, grasses and sedges in soybeans.

Postemergence Applications

Fomesafen 1.88 Herbicide is generally most effective when used postemergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for

effective control. Some bronzing, crinkling or spotting of soybean leaves may occur following a postemergence application, but soybeans soon outgrow these effects and develop normally.

Optimum weed control is achieved by postemergent applications of Fomesafen 1.88 Herbicide to young actively growing broadleaf weeds that are not under stress from moisture, temperature, low soil fertility or mechanical or chemical injury.

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

APPLICATION DIRECTIONS

Application Timing

Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Fomesafen 1.88 Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For best broad spectrum postemergence control of susceptible broadleaf weeds in Regions 2, 3, 4 and 5 (see Fomesafen 1.88 Herbicide Regional Use Maps), Fomesafen 1.88 Herbicide can be used with 1.0% - 2.5% v/v liquid nitrogen (28% or similar) or a minimum of 8.5 pounds ammonium sulfate per 100 gallons of spray volume.

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives (see Tank Mix Direction for Use):

Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO) - Use a nonphytotoxic COC or MOS containing 15-20% approved emulsifier, at 0.5-1% v/v (2 – 4 quarts/100 galons) of the finished spray volume. COC or MOS can improve weed control but may slightly reduce crop tolerance.

Nonionic Surfactant (NIS) -Use NIS containing at least 80% surface active agent at 0.25 - 0.5% v/v (1-2 quarts/100 gallons) of the finished spray volume.

Other Adjuvants -Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)

4. Is supported locally for use with Fomesafen 1.88 Herbicide on the target crop through proven field trials and through university and extension recommendations.
Note: No adjuvants are needed for preplant surface or preemergence applications unless Fomesafen 1.88 Herbicide is being used in a burndown on emerged weeds.

Recommended Mixing Order:

1. Fill the spray tank with half the required amount of water and begin agitation.*
2. Add fertilizer (UAN, AMS)
3. Add dry pesticide formulations.
4. Add Fomesafen 1.88 Herbicide Herbicide.
5. Add liquid pesticide formulations.
6. Add spray adjuvant (MSO, COC or NIS).
7. Add the remaining water and maintain constant agitation.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A minimum spray volume of 15 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective postemergence application of Fomesafen 1.88 Herbicide. The sprayer must be calibrated to provide the proper volume and rate per acre. In addition, the boom and nozzle height must be adjusted to provide complete coverage of target weeds.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

Band Applications

Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

band width in inches / row width in inches	X	broadcast rate per acre	=	band herbicide rate per acre
band width in inches / row width in inches	X	broadcast volume per acre	=	band water volume per acre

Aerial Application

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 psi pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 1.88 Herbicide may assist weed control.

Rainfastness

Fomesafen 1.88 Herbicide requires a 1 hour rain-free period for best results when applied postemergence.

RESTRICTIONS AND PRECAUTIONS

- A maximum of 1.6 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.6 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 1.3 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Fomesafen 1.88 Herbicide **(or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Fomesafen 1.88 Herbicide **(or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).
- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 1.88 Herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Source Dynamics supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Apply postemergence to actively growing weeds. Avoid applying Fomesafen 1.88 Herbicide to weeds or soybeans which are under stress from moisture, temperature, low soil fertility, or mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that groundspeed not exceed 10 mph during application.
- Do not graze treated areas or harvest for forage or hay.

- Do not apply within 45 days of soybean harvest.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Fomesafen 1.88 Herbicide at recommended rates:

Crop to be Planted	**Minimum Rotation Interval (Months After Last Fomesafen Application)**
Cotton, dry beans, snap beans and soybeans	0
Small grains such as wheat barley and rye	4
Corn*, peanuts, peas, rice and seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within.	18

Do not graze rotated small grain crops or harvest forage or straw for livestock.

*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

**Sorghum may be planted back after 10 months in Region 1.

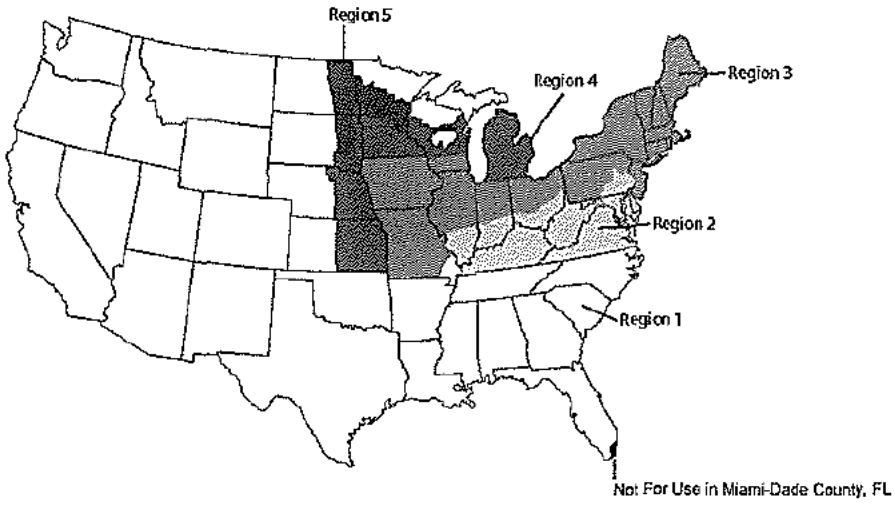
Replanting

If replanting is necessary in fields previously treated with Fomesafen 1.88 Herbicide, the field may be replanted to cotton, dry beans, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 1.88 Herbicide or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

USE RATES AND WEEDS CONTROLLED

REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS.

FOMESAFEN 1.88 REGIONAL USE MAP



REGION 1 (Maximum Rate: 1.6 pints per acre per year)

REGION 1-Includes the following states or portion of states where Fomesafen 2 SL Herbicide may be applied: Alabama, Arkansas, Florida (except Miami-Dade County), Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Giradeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2 (Maximum Rate: 1.6 pints per acre, alternate years)

REGION 2 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3 (Maximum Rate: 1.3 pints per acre, alternate years)

REGION 3 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee), and North of Interstate 70 in following states: Indiana, Illinois and Ohio.

REGION 4 (Maximum Rate: 1 pint per acre, alternate years)

REGION 4 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Kansas (all counties East of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties East of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5 (Maximum Rate: 0.75 pint per acre, alternate years)

REGION 5 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

APPLICATION RATES FOR WEED GROWTH STAGES

Weed	Fomesafen 1.88 Herbicide Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Anoda, spurred	--	2*	2	4
Balloonvine	--	--	2	4
Carpetweed	--	8" diameter size	unlimited size	unlimited size
Citron (wild watermelon)	--	2	4	4
Cocklebur, common	2	4	6	8
Copperleaf, hophornbeam	--	4	4	6
Copperleaf, Virginia	--	4	4	6
Crotalaria, showy	--	6	6	8
Croton, tropic	--	4	4	6
Cucumber, volunteer	--	4	6	8
Eclipta	--	2	4	4
Groundcherry, cutleaf	--	4	6	8
Hemp	--	4	6	6
Horsenettle	--	2*	4*	4*
Jimsonweed	4	6	8	8
Ladysthumb	2*	2	4	6
Lambsquarters, common[c]	2*	2*	2*	2*
Mexicanweed	--	2*	2	4
Morningglory spp.:				
Cypressvine	2	4	6	6
Entireleaf var.	3	3	4	5
Ivyleaf	3*	3	4	5
Purple moonflower	3*	3	5	6
Red (scarlet)	3*	3	6	6
Smallflower	3*	3	4	6
Pitted (smallwhite)	4*	4	6	6
Tall (common)	2*	2	3	5
Palmleaf (willowleaf)	3*	3	6	6
Mustard, wild	4	6	8	8
Nightshade, black	2	4	6	6
Nutsedge, yellow	--	--	*	*
Pigweed spp.:				
Amaranth, Palmer	2	4	6	6
Amaranth, spiny	2	2	4	6
Redroot	2	4	6	8
Smooth	2	4	6	6
Waterhemp, common	2*	2	4	6
Waterhemp, tall	2*	2	4	6

APPLICATION RATES FOR WEED GROWTH STAGES (Continued)

Weed	Fomesafen 1.88 Herbicide Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Poinsettia, wild	--	2	4	6
Purslane, common	--	multi-leaf 6" diameter	multi-leaf 8" diameter	multi-leaf 8" diameter
Pusley, Florida	--	2	2	4
Ragweed, common	4*	4	6	8
Ragweed, giant	4*	4	6	8
Redweed	--	--	2*	3*
Sesbania, hemp	--	8	12	12
Sicklepod	--	--	cotyledon	cotyledon
Sida, prickly	--	2*	2	4
Smartweed, Pennsylvania	4*	4	6	6
Smellmelon	--	2	2	4
Spurge, prostrate	--	--	1" diameter*	1" diameter*
Spurge, spotted	--	--	2*	2*
Starbur, bristly	--	4	4	6
Sunflower, common	--	--	2	4
Velvetleaf	--	2	4	4
Venice mallow	4	6	6	8
Witchweed	--	multi-leaf up to 7"	multi-leaf up to 10"	multi-leaf up to 10"
Yellow rocket	4	4	6	8

*suppression only

SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

Suppression of Annual Grasses

The grasses listed below may be suppressed by postemergence applications of Fomesafen 1.88 Herbicide at 1-1.5 pts./A. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, a tank mix with a fluazifop-P-butyl formulation is suggested. Consult tank mix section.

Barnyardgrass
Signalgrass, broadleaf
Crabgrass
Foxtail
- Giant
- Green
- Yellow

Goosegrass
Johnsongrass, seedling
Panicum, fall

Panicum, Texas

Suppression of Perennial Weeds

Use of Fomesafen 1.88 Herbicide postemergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though Fomesafen 1.88 Herbicide and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, climbing
Milkweed, honeyvine
Bindweed, field
Bindweed, hedge
Trumpetcreeper

TANK MIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

Fomesafen 1.88 Herbicide can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran,, Butyrac®, Classic®, Dual MAGNUM, Dual II MAGNUM®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax™), Paraquat Concentrate, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Prowl, Raptor, Resource®, Select®, Sequence, Scepter®, and Synchrony®STS®.

Under certain conditions, the mixture of Fomesafen 1.88 Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 1.88 Herbicide or Fomesafen 1.88 Herbicide mixtures. Where Fomesafen 1.88 Herbicide or the Fomesafen 1.88 Herbicide mixture is applied first, apply the postemergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 1.88 Herbicide.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 1.88 Herbicide on non-STS varieties. This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

GLYPHOSATE TOLERANT SOYBEAN TANK MIXES

Fomesafen 1.88 Herbicide at 6-12 oz./A, can be tank mixed with glyphosate products such as Touchdown or Roundup that are labeled for glyphosate tolerant soybeans for improved postemergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp and black

nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 1.88 Herbicide.

FOLLOW THE RECOMMENDATIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any nontarget vegetation.

NOTE: Postemergence application of this tank mix on soybean varieties which do not contain the glyphosate tolerant gene will result in severe crop injury or death of the soybean crop. Always read and follow the recommendations, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

AERIAL SPRAY DRIFT MANAGEMENT ADVISORY
SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory.**

AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and dues not supersede the mandatory label requirements.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature and Humidity,** and **Temperature Inversion** sections of this label).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure

reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- **Number of nozzles** -Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** -Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

Boom Length

For some use patterns, reducing the effective boom length to less than $^{3}/_{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions)

indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas
The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPENDIX

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus spinosus*
Anoda, spurred	*Adoda cristata*
Balloonvine	*Cardiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field	*Convolvulus arvensis*
Bindweed, hedge	*Calystegia sepium*
Broadleaf signalgrass	*Bracharia platyphylia*
Carpetweed	*Mullugo verticillata*
Citron (wild watermelon)	*Citrullus vulgaris*
Cocklebur, common	*Xanthium strumarium*
Copperleaf, hophornbeam	*Acalypha ostryifolia*
Copperleaf, Virginia	*Svs;ufjs bothomovs*
Crabgrass	*Digitaria* spp.
Crotalaria, showy	*Crotolaria spectabilis*
Croton, tropic	*Croton glandulosus*
Cucumber, volunteer	*Cucumis sativas*
Eclipta	*Eclipta prostrate*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria virdis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry, cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass, seedling	*Sorghum halapense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Mexicanweed	*Caperonia castanifolia*
Milkweed, climbing	*Sarcostemma cyanchoides*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory:	
Cypressvine	*Ipomoea quamoclit*
Entireleaf var.	*Ipomoea hederacea* var. *intergriuscula*

Ivyleaf	*Ipomoea hederacea*
Purple moonflower	*Ipomoea turbinate*
Red (scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (smallwhite)	*Ipomoea lacunose*
Tall (common)	*Impmoea purpurea*
Palmleaf (willowleaf)	*Impmoea wrightii*
Mustard, wild	*Sinapis arvensis*
COMMON NAME	**SCIENTIFIC NAME**
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum ptychanthum*
Nightshade, hairy	*Solanum physalifolium*
Nutsedge, yellow	*Cyperus esculentus*
Panicum, fall	*Panicum dichotomiflorum*
Panicum, Texas	*Panicum texanum*
Pigweed:	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	
Redroot	*Amaranthus retroflexus*
Smooth	*Amaranthus hybridus*
Poinsettia, wild	*Euphorbia heterophylla*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common	*Ambrosia artemisifolia*
Ragweed, Giant	*Ambrosia trifida*
Redweed	*Melchia corchorifolia*
Sesbania, hemp	*Sesbania exaltata*
Sicklepod	*Senna obtusifolia*
Sida, prickly	*Sida spinosa*
Signalgrass, broadleaf	*Bracharia platyphylia*
Smartweed, Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Spurge, prostrate	*Chamaesyce humistrata*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Sunflower, common	*Helianthus annuus*
Trumpetcreeper	*Campis redicans*
Velvetleaf	*Abutilon theophrasti*
Venice mallow	*Hibiscus trionum*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Prohibitions
Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage
Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling for Containers Less than 5 Gallons
Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Container Handling for Bulk and Mini-Bulk Containers
Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application or rinsate collection system. Repeat this rinsing procedure 2 more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities. If the container is damaged, leaking or obsolete, contact Orion Fomes, LLC at 480-218-4289.
CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES, LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No

agent of Orion Fomes, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ORION FOMES LLC's ELECTION, THE REPLACEMENT OF PRODUCT.

October 10, 2010

Document Processing Desk
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 1.88 Herbicide (87655-3): Final Label

Thank you for your September 15, 2011 Notice of Pesticide Registration for this product. Orion Fomes, LLC submits here Form 8570-1 and one copy of the final label.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

Print Form

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060. Approval expires 2-28

EPA

United States
Environmental Protection Agency
Washington, DC 20460

- [ ] Registration
- [ ] Amendment
- [x] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
87655-3	K. Montague	[ ] None [x] Restricted
4. Company/Product (Name)	**PM#**	
Fomesafen 1.88 Herbicide	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

[x] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

Section - II

- [ ] Amendment - Explain below.
- [x] Final printed labels in repeonse to Agency letter dated Sept. 15, 2011
- [ ] Resubmission in response to Agency letter dated _____
- [ ] "Me Too" Application.
- [ ] Notification - Explain below.
- [ ] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of final label.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes [x] No	[ ] Yes [x] No	[ ] Yes [ ] No	[ ] Metal [x] Plastic [ ] Glass [ ] Paper [ ] Other (Specify)
** Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[x] Label [ ] Container	2.5 gal	[ ] On Label [x] On Labeling accompanying product

6. Manner in Which Label is Affixed to Product [ ] Lithograph [ ] Paper glued [ ] Stenciled [x] Other plastic sleeve

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Robert Hawk	Agent	928-342-3489

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title
Robert Hawk	Agent
4. Typed Name	**5. Date**
Robert Hawk	10/10/2011

Orion Fomes final label Oct. 10, 2011

FOMESAFEN 1.88 HERBICIDE

For control of weeds in soybeans

GROUP 14 HERBICIDE

ACTIVE INGREDIENT	
Sodium salt of fomesafen [5-[2-chloro-4-trifluoromethyl)phenoxy]-*N*-(methylsulfonyl)-2-nitrobenzamide]	22.1%
OTHER INGREDIENTS:	77.9%
TOTAL	**100.0%**

Equivalent to 21.0% fomesafen or 1.88 pounds per gallon fomesafen

KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO

Si usted no entiende la etiqueta, busque al alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See Additional Precautionary Statements and Directions for Use on label.

FIRST AID

IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

For MEDICAL Emergencies 24 Hours a Day Call a Poison Control Center at 1-800-222-1222.
For CHEMICAL Emergency Assistance (Spill, Fire or Accident) Call ChemTrec at 1-800-424-9300
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate tbe use of gastric lavage.

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277
Tel. 480-218-4289

EPA Reg. No. 87655-3
EPA Est. No.
Net Contents: 2.5 gal

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING/AVISO

This product contains fomesafen, which has been determined to cause tumors in laboratory mice. Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label.

CAUSES SKIN IRRITATION. HARMFUL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. Causes moderate eye irritation. Do not get on skin or on clothing. Avoid contact with eyes. Prolonged or repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when cleaning equipment, mixing or loading

In addition, for aerial applications mixers and loaders handling more than 150 gallons of Fomesafen 1.88 Herbicide in any single workday must wear:

- Dust/mist filtering NIOSH-approved respirator with any N, R, P or HE filter.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove and wash contaminated clothing before reuse.
- Remove PPE immediately after handling this product. Wash the outside of gloves

before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters. Do not apply when weather conditions favor drift from target area.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton.
- Chemical-resistant footwear plus socks

INFORMATION

Read all label directions before using.

Fomesafen 1.88 Herbicide is a selective herbicide which may be applied preplant, preemergence or postemergence for control or partial control of broadleaf weeds, grasses and sedges in soybeans.

Postemergence Applications

Fomesafen 1.88 Herbicide is generally most effective when used postemergence, working

through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Some bronzing, crinkling or spotting of soybean leaves may occur following a postemergence application, but soybeans soon outgrow these effects and develop normally.

Optimum weed control is achieved by postemergent applications of Fomesafen 1.88 Herbicide to young actively growing broadleaf weeds that are not under stress from moisture, temperature, low soil fertility or mechanical or chemical injury.

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

APPLICATION DIRECTIONS

Application Timing

Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Fomesafen 1.88 Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For best broad spectrum postemergence control of susceptible broadleaf weeds in Regions 2, 3, 4 and 5 (see Fomesafen 1.88 Herbicide Regional Use Maps), Fomesafen 1.88 Herbicide can be used with 1.0% - 2.5% v/v liquid nitrogen (28% or similar) or a minimum of 8.5 pounds ammonium sulfate per 100 gallons of spray volume.

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives (see Tank Mix Direction for Use):

Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO) - Use a nonphytotoxic COC or MOS containing 15-20% approved emulsifier, at 0.5-1% v/v (2 – 4 quarts/100 galons) of the finished spray volume. COC or MOS can improve weed control but may slightly reduce crop tolerance.

Nonionic Surfactant (NIS) -Use NIS containing at least 80% surface active agent at 0.25 - 0.5% v/v (1-2 quarts/100 gallons) of the finished spray volume.

Other Adjuvants -Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.

3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with Fomesafen 1.88 Herbicide on the target crop through proven field trials and through university and extension recommendations.

Note: No adjuvants are needed for preplant surface or preemergence applications unless Fomesafen 1.88 Herbicide is being used in a burndown on emerged weeds.

Recommended Mixing Order:

1. Fill the spray tank with half the required amount of water and begin agitation.*
2. Add fertilizer (UAN, AMS)
3. Add dry pesticide formulations.
4. Add Fomesafen 1.88 Herbicide Herbicide.
5. Add liquid pesticide formulations.
6. Add spray adjuvant (MSO, COC or NIS).
7. Add the remaining water and maintain constant agitation.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A minimum spray volume of 15 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective postemergence application of Fomesafen 1.88 Herbicide. The sprayer must be calibrated to provide the proper volume and rate per acre. In addition, the boom and nozzle height must be adjusted to provide complete coverage of target weeds.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

Band Applications

Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

band width in inches row width in inches	X	broadcast rate per acre	=	band herbicide rate per acre
band width in inches row width in inches	X	broadcast volume per acre	=	band water volume per acre

Aerial Application

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 psi pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 1.88 Herbicide may assist weed control.

Rainfastness

Fomesafen 1.88 Herbicide requires a 1 hour rain-free period for best results when applied postemergence.

RESTRICTIONS AND PRECAUTIONS

- A maximum of 1.6 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.6 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 1.3 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Fomesafen 1.88 Herbicide **(or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Fomesafen 1.88 Herbicide **(or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).
- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 1.88 Herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Source Dynamics supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Apply postemergence to actively growing weeds. Avoid applying Fomesafen 1.88 Herbicide to weeds or soybeans which are under stress from moisture, temperature, low soil fertility, or mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that groundspeed not exceed 10 mph during application.

- Do not graze treated areas or harvest for forage or hay.
- Do not apply within 45 days of soybean harvest.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Fomesafen 1.88 Herbicide at recommended rates:

Crop to be Planted	**Minimum Rotation Interval (Months After Last Fomesafen Application)**
Cotton, dry beans, snap beans and soybeans	0
Small grains such as wheat barley and rye	4
Corn*, peanuts, peas, rice and seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within.	18

Do not graze rotated small grain crops or harvest forage or straw for livestock.

*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

**Sorghum may be planted back after 10 months in Region 1.

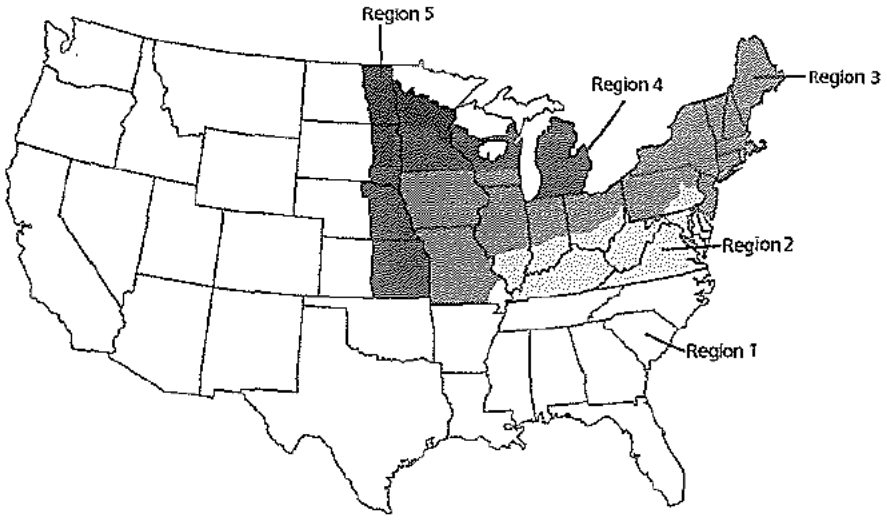
Replanting

If replanting is necessary in fields previously treated with Fomesafen 1.88 Herbicide, the field may be replanted to cotton, dry beans, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 1.88 Herbicide or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

USE RATES AND WEEDS CONTROLLED

REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS.

FOMESAFEN 1.88 REGIONAL USE MAP



REGION 1 (Maximum Rate: 1.6 pints per acre per year)

REGION 1-Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Giradeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2 (Maximum Rate: 1.6 pints per acre, alternate years)

REGION 2 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3 (Maximum Rate: 1.3 pints per acre, alternate years)

REGION 3 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee), and North of Interstate 70 in following states: Indiana, Illinois and Ohio.

REGION 4 (Maximum Rate: 1 pint per acre, alternate years)

REGION 4 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Kansas (all counties East of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties East of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5 (Maximum Rate: 0.75 pint per acre, alternate years)

REGION 5 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

APPLICATION RATES FOR WEED GROWTH STAGES

Weed	Fomesafen 1.88 Herbicide Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Anoda, spurred	--	2*	2	4
Balloonvine	--	--	2	4
Carpetweed	--	8" diameter size	unlimited size	unlimited size
Citron (wild watermelon)	--	2	4	4
Cocklebur, common	2	4	6	8
Copperleaf, hophornbeam	--	4	4	6
Copperleaf, Virginia	--	4	4	6
Crotalaria, showy	--	6	6	8
Croton, tropic	--	4	4	6
Cucumber, volunteer	--	4	6	8
Eclipta	--	2	4	4
Groundcherry, cutleaf	--	4	6	8
Hemp	--	4	6	6
Horsenettle	--	2*	4*	4*
Jimsonweed	4	6	8	8
Ladysthumb	2*	2	4	6
Lambsquarters, common[c]	2*	2*	2*	2*
Mexicanweed	--	2*	2	4
Morningglory spp.:				
Cypressvine	2	4	6	6
Entireleaf var.	3	3	4	5
Ivyleaf	3*	3	4	5
Purple moonflower	3*	3	5	6
Red (scarlet)	3*	3	6	6
Smallflower	3*	3	4	6
Pitted (smallwhite)	4*	4	6	6
Tall (common)	2*	2	3	5
Palmleaf (willowleaf)	3*	3	6	6
Mustard, wild	4	6	8	8
Nightshade, black	2	4	6	6
Nutsedge, yellow	--	--	*	*
Pigweed spp.:				
Amaranth, Palmer	2	4	6	6
Amaranth, spiny	2	2	4	6
Redroot	2	4	6	8
Smooth	2	4	6	6
Waterhemp, common	2*	2	4	6
Waterhemp, tall	2*	2	4	6

APPLICATION RATES FOR WEED GROWTH STAGES (Continued)

Weed	Fomesafen 1.88 Herbicide Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Poinsettia, wild	--	2	4	6
Purslane, common	--	multi-leaf 6" diameter	multi-leaf 8" diameter	multi-leaf 8" diameter
Pusley, Florida	--	2	2	4
Ragweed, common	4*	4	6	8
Ragweed, giant	4*	4	6	8
Redweed	--	--	2*	3*
Sesbania, hemp	--	8	12	12
Sicklepod	--	--	cotyledon	cotyledon
Sida, prickly	--	2*	2	4
Smartweed, Pennsylvania	4*	4	6	6
Smellmelon	--	2	2	4
Spurge, prostrate	--	--	1" diameter*	1" diameter*
Spurge, spotted	--	--	2*	2*
Starbur, bristly	--	4	4	6
Sunflower, common	--	--	2	4
Velvetleaf	--	2	4	4
Venice mallow	4	6	6	8
Witchweed	--	multi-leaf up to 7"	multi-leaf up to 10"	multi-leaf up to 10"
Yellow rocket	4	4	6	8

*suppression only

SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

Suppression of Annual Grasses

The grasses listed below may be suppressed by postemergence applications of Fomesafen 1.88 Herbicide at 1-1.5 pts./A. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, a tank mix with a fluazifop-P-butyl formulation is suggested. Consult tank mix section.

Barnyardgrass
Signalgrass, broadleaf
Crabgrass
Foxtail
- Giant
- Green
- Yellow

Goosegrass
Johnsongrass, seedling
Panicum, fall

Panicum, Texas

Suppression of Perennial Weeds

Use of Fomesafen 1.88 Herbicide postemergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though Fomesafen 1.88 Herbicide and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, climbing
Milkweed, honeyvine
Bindweed, field
Bindweed, hedge
Trumpetcreeper

TANK MIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

Fomesafen 1.88 Herbicide can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran,, Butyrac®, Classic®, Dual MAGNUM, Dual II MAGNUM®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax™), Paraquat Concentrate, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Prowl, Raptor, Resource®, Select®, Sequence, Scepter®, and Synchrony®STS®.

Under certain conditions, the mixture of Fomesafen 1.88 Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 1.88 Herbicide or Fomesafen 1.88 Herbicide mixtures. Where Fomesafen 1.88 Herbicide or the Fomesafen 1.88 Herbicide mixture is applied first, apply the postemergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 1.88 Herbicide.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 1.88 Herbicide on non-STS varieties. This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

GLYPHOSATE TOLERANT SOYBEAN TANK MIXES

Fomesafen 1.88 Herbicide at 6-12 oz./A, can be tank mixed with glyphosate products such as Touchdown or Roundup that are labeled for glyphosate tolerant soybeans for improved postemergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp and black

nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 1.88 Herbicide.

FOLLOW THE RECOMMENDATIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any nontarget vegetation.

NOTE: Postemergence application of this tank mix on soybean varieties which do not contain the glyphosate tolerant gene will result in severe crop injury or death of the soybean crop. Always read and follow the recommendations, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

AERIAL SPRAY DRIFT MANAGEMENT ADVISORY

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory.**

AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and dues not supersede the mandatory label requirements.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature and Humidity,** and **Temperature Inversion** sections of this label).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure

reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- **Number of nozzles** -Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** -Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

Boom Length

For some use patterns, reducing the effective boom length to less than $^{3}/4$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions)

indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas
The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPENDIX

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus spinosus*
Anoda, spurred	*Adoda cristata*
Balloonvine	*Cardiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field	*Convolvulus arvensis*
Bindweed, hedge	*Calystegia sepium*
Broadleaf signalgrass	*Bracharia platyphylia*
Carpetweed	*Mullugo verticillata*
Citron (wild watermelon)	*Citrullus vulgaris*
Cocklebur, common	*Xanthium strumarium*
Copperleaf, hophornbeam	*Acalypha ostryifolia*
Copperleaf, Virginia	*Svs;ufjs bothomovs*
Crabgrass	*Digitaria* spp.
Crotalaria, showy	*Crotolaria spectabilis*
Croton, tropic	*Croton glandulosus*
Cucumber, volunteer	*Cucumis sativas*
Eclipta	*Eclipta prostrate*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria virdis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry, cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass, seedling	*Sorghum halapense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Mexicanweed	*Caperonia castanifolia*
Milkweed, climbing	*Sarcostemma cyanchoides*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory:	
Cypressvine	*Ipomoea quamoclit*
Entireleaf var.	*Ipomoea hederacea* var. *intergriuscula*

Ivyleaf	*Ipomoea hederacea*
Purple moonflower	*Ipomoea turbinate*
Red (scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (smallwhite)	*Ipomoea lacunose*
Tall (common)	*Impmoea purpurea*
Palmleaf (willowleaf)	*Impmoea wrightii*
Mustard, wild	*Sinapis arvensis*
COMMON NAME	**SCIENTIFIC NAME**
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum ptychanthum*
Nightshade, hairy	*Solanum physalifolium*
Nutsedge, yellow	*Cyperus esculentus*
Panicum, fall	*Panicum dichotomiflorun*
Panicum, Texas	*Panicum texanum*
Pigweed:	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	
Redroot	*Amaranthus retroflexus*
Smooth	*Amaranthus hybridus*
Poinsettia, wild	*Euphorbia heterophylla*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common	*Ambrosia artemisifolia*
Ragweed, Giant	*Ambrosia trifida*
Redweed	*Melchia corchorifolia*
Sesbania, hemp	*Sesbania exaltata*
Sicklepod	*Senna obtusifolia*
Sida, prickly	*Sida spinosa*
Signalgrass, broadleaf	*Bracharia platyphylia*
Smartweed, Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Spurge, prostrate	*Chamaesyce humistrata*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Sunflower, common	*Helianthus annuus*
Trumpetcreeper	*Campis redicans*
Velvetleaf	*Abutilon theophrasti*
Venice mallow	*Hibiscus trionum*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Prohibitions
Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage
Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling for Containers Less than 5 Gallons
Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

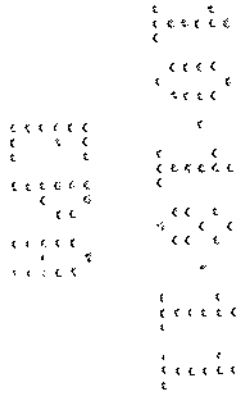
Container Handling for Bulk and Mini-Bulk Containers
Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application or rinsate collection system. Repeat this rinsing procedure 2 more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities. If the container is damaged, leaking or obsolete, contact Orion Fomes, LLC at 480-218-4289.
CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES, LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No

agent of Orion Fomes, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ORION FOMES LLC's ELECTION, THE REPLACEMENT OF PRODUCT.



Material Sent for Data Extraction

Reg # 87655-3

Description: New Product Registration

☐ Material(s) Sent to Data Extraction Contractors:

- ☒ New Stamped Label Dated 9/8/11
- ☐ Notification Dated _____
- ☒ New CSF(s) Dated Basic 7/27/11
- ☐ Other: _____

☒ Decision #: 448103

☐ Other Action/Comments: _____

Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).

Reviewer: Michael Walsh

Phone: 308-2972 Division: RD/IHB

Date: 9/8/11

Created February 3, 2011

	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460	EPA Reg.Number: 87655-3	Date of Issuance:

NOTICE OF PESTICIDE:
X Registration
__Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

Name of Pesticide Product:
Fomesafen 1.88 Herbicide

Name and Address of Registrant (include ZIP Code):

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data. If required, failure to submit acceptable data to fulfill these requirements may result in registration cancellation in accordance with FIFRA section 6(c).

2) Replace the phrase "EPA Reg. No. 87655-x" with "EPA Reg. No. 87655-3" and assure that the EPA Establishment Number and Net Contents are also on the label.

3) Per the Acute Toxicity Review, the order of the statements in the First Aid box on page 1 of the label must be changed to read as follows:

IF ON SKIN OR CLOTHING.....
IF SWALLOWED.....
IF IN EYES.....
IF INHALED.....

NOTE: The IF INHALED statement is not required by the Acute Toxicity Review, and is considered optional. It may remain on the label as additional safety information for product users or it may be removed from the label.

SEE NEXT PAGE FOR ADDITIONAL COMMENTS

Signature of Approving Official: Kathryn V. Montague Product Manager 23 Herbicide Branch Registration Division (7505P)	Date:

4) Per the Acute Toxicity Review, the second paragraph under the Hazards to Humans and Domestic Animals header on page 2 must be changed to read as follows:

> "Causes skin irritation. Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Do not get on skin or clothing. Avoid contact with eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals."

NOTE: The phrase appearing in this section on the proposed label as "WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING." is not required. It may be remain in this section as additional safety instructions for the user or it may be removed from the label.

5) Per the Acute Toxicity Review, the following statement must appear under the PERSONAL PROTECTIVE EQUIPMENT (PPE) requirements:

> "Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry."

6) Per the Acute Toxicity Review, the following text must be added to the USER SAFETY RECOMMENDATIONS section of the label:

> "Remove and wash contaminated clothing before reuse."

7) For the purpose of clarity, change the header in the middle of page 6 from "PRECAUTIONS" to "RESTRICTIONS AND PRECAUTIONS".

8) NOTE: While no additional data is being requested at this time, marketing claims made on the pesticide label must be substantiated by data maintained in your files. If data supporting marketing claims made on the product label is not available then those claims must be removed.

9) NOTE: Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

SEE NEXT PAGE

10) Submit one (1) copy of the revised final printed label before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

draft Orion Fomes label April 13, 2011

FOMESAFEN 1.88 HERBICIDE

For control of weeds in soybeans

GROUP 14 HERBICIDE

ACTIVE INGREDIENT	
Sodium salt of	
fomesafen [5-[2-chloro-4-trifluoromethyl)phenoxy]-*N*-(methylsulfonyl)-2-nitrobenzamide]	22.1%
OTHER INGREDIENTS:	77.9%
TOTAL	100.0%

Equivalent to 21.0% fomesafen or 1.88 pounds per gallon fomesafen

KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO

Si usted no entiende la etiqueta, busque al alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See Additional Precautionary Statements and Directions for Use on label.

FIRST AID

IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison cootrol center or doctor for further treatment advice.

For MEDICAL Emergencies 24 Hours a Day Call a Poison Control Center at 1-800-222-1222.
For CHEMICAL Emergency Assistance (Spill, Fire or Accident) Call ChemTrec at 1-800-424-9300
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

Orion Fomes, LLC
P.O. Box 21720
Mesa, AZ 85277
Tel. 480-218-4289

ACCEPTED
with COMMENTS
In EPA Letter Dated:

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

87655-3

EPA Reg. No. 87655-x
EPA Est. No.
Net Contents: 2.5 gal

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING/AVISO

This product contains fomesafen, which has been determined to cause tumors in laboratory mice. Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label.

CAUSES EYE AND SKIN IRRITATION. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE SKIN. Do not get on skin or on clothing. Avoid breathing vapor or spray mist. Avoid contact with eyes. Prolonged or repeated skin contact may cause allergic reactions in some individuals. **WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when cleaning equipment, mixing or loading

In addition, for aerial applications mixers and loaders handling more than 150 gallons of Fomesafen 1.88 Herbicide in any single workday must wear:

- Dust/mist filtering NIOSH-approved respirator with any N, R, P or HE filter.

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters. Do not apply when weather conditions favor drift from target area.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton.
- Chemical-resistant footwear plus socks

INFORMATION

Read all label directions before using.

Fomesafen 1.88 Herbicide is a selective herbicide which may be applied preplant, preemergence or postemergence for control or partial control of broadleaf weeds, grasses and sedges in soybeans.

Postemergence Applications

Fomesafen 1.88 Herbicide is generally most effective when used postemergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Some bronzing, crinkling or spotting of soybean leaves may occur following a postemergence application, but soybeans soon outgrow these effects and develop normally.

Optimum weed control is achieved by postemergent applications of Fomesafen 1.88 Herbicide to young actively growing broadleaf weeds that are not under stress from moisture, temperature, low soil fertility or mechanical or chemical injury.

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

APPLICATION DIRECTIONS

Application Timing

Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Fomesafen 1.88 Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For best broad spectrum postemergence control of susceptible broadleaf weeds in Regions 2, 3, 4 and 5 (see Fomesafen 1.88 Herbicide Regional Use Maps), Fomesafen 1.88 Herbicide can be used with 1.0% - 2.5% v/v liquid nitrogen (28% or similar) or a minimum of 8.5 pounds ammonium sulfate per 100 gallons of spray volume.

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives (see Tank Mix Direction for Use):

Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO) - Use a nonphytotoxic COC or MOS containing 15-20% approved emulsifier, at 0.5-1% v/v (2 – 4 quarts/100 galons) of the finished spray volume. COC or MOS can improve weed control but may slightly reduce crop tolerance.

Nonionic Surfactant (NIS) -Use NIS containing at least 80% surface active agent at 0.25 - 0.5% v/v (1-2 quarts/100 gallons) of the finished spray volume.

Other Adjuvants -Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with Fomesafen 1.88 Herbicide on the target crop through proven field trials and through university and extension recommendations.

Note: No adjuvants are needed for preplant surface or preemergence applications unless

Fomesafen 1.88 Herbicide is being used in a burndown on emerged weeds.

Recommended Mixing Order:

1. Fill the spray tank with half the required amount of water and begin agitation.*
2. Add fertilizer (UAN, AMS)
3. Add dry pesticide formulations.
4. Add Fomesafen 1.88 Herbicide Herbicide.
5. Add liquid pesticide formulations.
6. Add spray adjuvant (MSO, COC or NIS).
7. Add the remaining water and maintain constant agitation.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A minimum spray volume of 15 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective postemergence application of Fomesafen 1.88 Herbicide. The sprayer must be calibrated to provide the proper volume and rate per acre. In addition, the boom and nozzle height must be adjusted to provide complete coverage of target weeds.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

Band Applications

Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{band herbicide rate per acre}$$

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast volume per acre} = \text{band water volume per acre}$$

Aerial Application

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum

of 5 gallons per acre of spray mixture should be applied with a maximum of 40 psi pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 1.88 Herbicide may assist weed control.

Rainfastness

Fomesafen 1.88 Herbicide requires a 1 hour rain-free period for best results when applied postemergence.

PRECAUTIONS

- A maximum of 1.6 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.6 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 1.3 pts. of Fomesafen 1.88 Herbicide **(or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Fomesafen 1.88 Herbicide **(or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Fomesafen 1.88 Herbicide **(or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen)** may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).
- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 1.88 Herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Source Dynamics supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Apply postemergence to actively growing weeds. Avoid applying Fomesafen 1.88 Herbicide to weeds or soybeans which are under stress from moisture, temperature, low soil fertility, or mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that groundspeed not exceed 10 mph during application.
- Do not graze treated areas or harvest for forage or hay.
- Do not apply within 45 days of soybean harvest.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Fomesafen 1.88 Herbicide at recommended rates:

Crop to be Planted	**Minimum Rotation Interval (Months After Last Fomesafen Application)**
Cotton, dry beans, snap beans and soybeans	0
Small grains such as wheat barley and rye	4
Corn*, peanuts, peas, rice and seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within.	18

Do not graze rotated small grain crops or harvest forage or straw for livestock.

*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

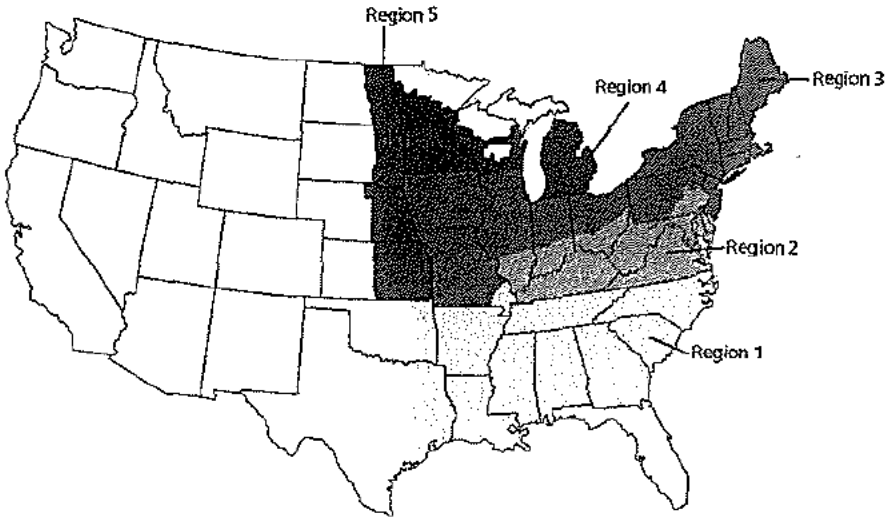
**Sorghum may be planted back after 10 months in Region 1.

Replanting
If replanting is necessary in fields previously treated with Fomesafen 1.88 Herbicide, the field may be replanted to cotton, dry beans, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 1.88 Herbicide or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

USE RATES AND WEEDS CONTROLLED

REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS.

FOMESAFEN 1.88 REGIONAL USE MAP



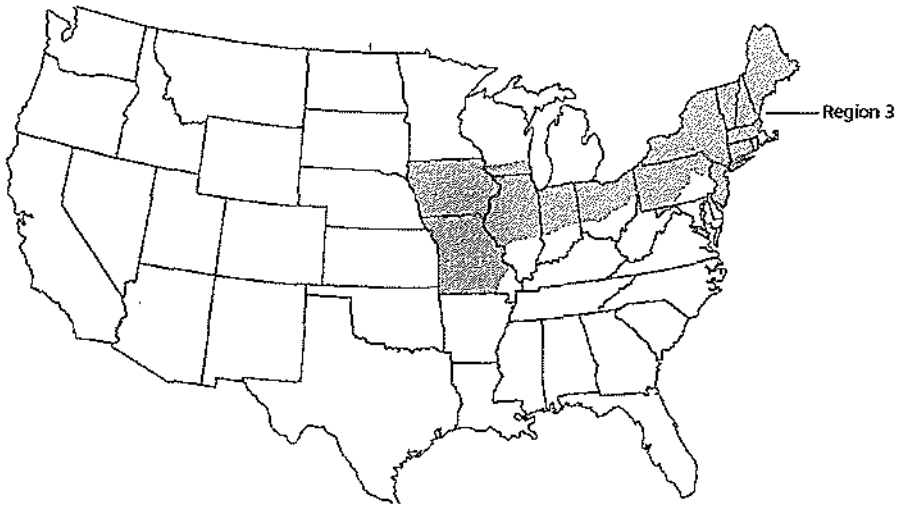
REGION 1 (Maximum Rate: 1.6 pints per acre per year)

REGION 1-Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Giradeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2 (Maximum Rate: 1.6 pints per acre, alternate years)

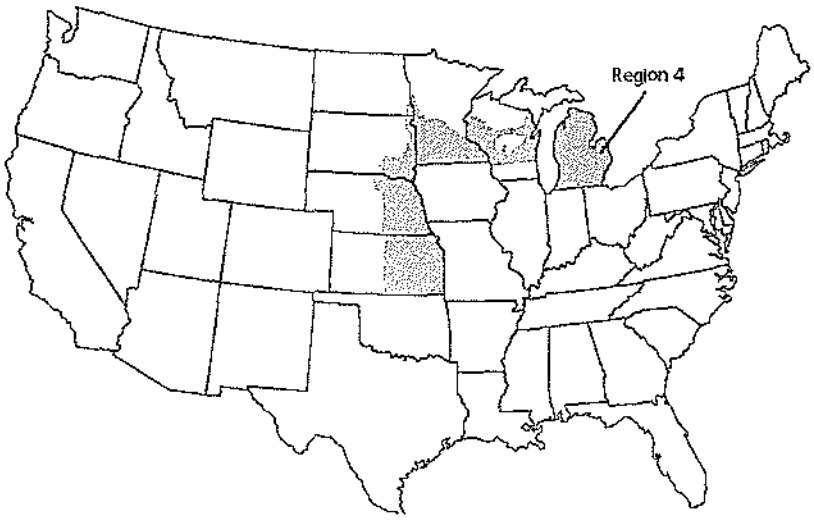
REGION 2 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3 (Maximum Rate: 1.3 pints per acre, alternate years)



REGION 3 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee), and North of Interstate 70 in following states: Indiana, Illinois and Ohio.

REGION 4 (Maximum Rate: 1 pint per acre, alternate years)



REGION 4 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: Kansas (all counties East of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties East of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5 (Maximum Rate: 0.75 pint per acre, alternate years)

REGION 5 -Includes the following states or portion of states where Fomesafen 1.88 Herbicide may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

APPLICATION RATES FOR WEED GROWTH STAGES

Weed	Fomesafen 1.88 Herbicide Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Anoda, spurred	--	2*	2	4
Balloonvine	--	--	2	4
Carpetweed	--	8" diameter size	unlimited size	unlimited size
Citron (wild watermelon)	--	2	4	4
Cocklebur, common	2	4	6	8
Copperleaf, hophornbeam	--	4	4	6
Copperleaf, Virginia	--	4	4	6
Crotalaria, showy	--	6	6	8
Croton, tropic	--	4	4	6
Cucumber, volunteer	--	4	6	8
Eclipta	--	2	4	4
Groundcherry, cutleaf	--	4	6	8
Hemp	--	4	6	6
Horsenettle	--	2*	4*	4*
Jimsonweed	4	6	8	8
Ladysthumb	2*	2	4	6
Lambsquarters, common[c]	2*	2*	2*	2*
Mexicanweed	--	2*	2	4
Morningglory spp.:				
Cypressvine	2	4	6	6
Entireleaf var.	3	3	4	5
Ivyleaf	3*	3	4	5
Purple moonflower	3*	3	5	6
Red (scarlet)	3*	3	6	6
Smallflower	3*	3	4	6
Pitted (smallwhite)	4*	4	6	6
Tall (common)	2*	2	3	5
Palmleaf (willowleaf)	3*	3	6	6
Mustard, wild	4	6	8	8
Nightshade, black	2	4	6	6
Nutsedge, yellow	--	--	*	*
Pigweed spp.:				
Amaranth, Palmer	2	4	6	6
Amaranth, spiny	2	2	4	6
Redroot	2	4	6	8
Smooth	2	4	6	6
Waterhemp, common	2*	2	4	6
Waterhemp, tall	2*	2	4	6

APPLICATION RATES FOR WEED GROWTH STAGES (Continued)

Weed	Fomesafen 1.88 Herbicide Rate (pints per acre) Maximum Growth Stage Controlled At			
	0.75 pt/A No. of True Leaves	1 pt/A No. of True Leaves	1.25 pt/A No. of True Leaves	1.5 pt/A No. of True Leaves
Poinsettia, wild	--	2	4	6
Purslane, common	--	multi-leaf 6" diameter	multi-leaf 8" diameter	multi-leaf 8" diameter
Pusley, Florida	--	2	2	4
Ragweed, common	4*	4	6	8
Ragweed, giant	4*	4	6	8
Redweed	--	--	2*	3*
Sesbania, hemp	--	8	12	12
Sicklepod	--	--	cotyledon	cotyledon
Sida, prickly	--	2*	2	4
Smartweed, Pennsylvania	4*	4	6	6
Smellmelon	--	2	2	4
Spurge, prostrate	--	--	1" diameter*	1" diameter*
Spurge, spotted	--	--	2*	2*
Starbur, bristly	--	4	4	6
Sunflower, common	--	--	2	4
Velvetleaf	--	2	4	4
Venice mallow	4	6	6	8
Witchweed	--	multi-leaf up to 7"	multi-leaf up to 10"	multi-leaf up to 10"
Yellow rocket	4	4	6	8

*suppression only

SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

Suppression of Annual Grasses

The grasses listed below may be suppressed by postemergence applications of Fomesafen 1.88 Herbicide at 1-1.5 pts./A. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, a tank mix with a fluazifop-P-butyl formulation is suggested. Consult tank mix section.

Barnyardgrass
Signalgrass, broadleaf
Crabgrass
Foxtail
- Giant
- Green
- Yellow

Goosegrass
Johnsongrass, seedling
Panicum, fall

Panicum, Texas

Suppression of Perennial Weeds

Use of Fomesafen 1.88 Herbicide postemergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though Fomesafen 1.88 Herbicide and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, climbing
Milkweed, honeyvine
Bindweed, field
Bindweed, hedge
Trumpetcreeper

TANK MIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

Fomesafen 1.88 Herbicide can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran,, Butyrac®, Classic®, Dual MAGNUM, Dual II MAGNUM®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax™), Paraquat Concentrate, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Prowl, Raptor, Resource®, Select®, Sequence, Scepter®, and Synchrony®STS®.

Under certain conditions, the mixture of Fomesafen 1.88 Herbicide with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the postemergence grass herbicide before applying Fomesafen 1.88 Herbicide or Fomesafen 1.88 Herbicide mixtures. Where Fomesafen 1.88 Herbicide or the Fomesafen 1.88 Herbicide mixture is applied first, apply the postemergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 1.88 Herbicide.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 1.88 Herbicide on non-STS varieties. This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

GLYPHOSATE TOLERANT SOYBEAN TANK MIXES

Fomesafen 1.88 Herbicide at 6-12 oz./A, can be tank mixed with glyphosate products such as Touchdown or Roundup that are labeled for glyphosate tolerant soybeans for improved postemergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp and black

nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 1.88 Herbicide.

FOLLOW THE RECOMMENDATIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any nontarget vegetation.

NOTE: Postemergence application of this tank mix on soybean varieties which do not contain the glyphosate tolerant gene will result in severe crop injury or death of the soybean crop. Always read and follow the recommendations, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

AERIAL SPRAY DRIFT MANAGEMENT ADVISORY
SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory.**

AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and dues not supersede the mandatory label requirements.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature and Humidity,** and **Temperature Inversion** sections of this label).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure

reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- **Number of nozzles** -Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** -Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

Boom Length

For some use patterns, reducing the effective boom length to less than $^{3}/_{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions)

indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas
The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPENDIX

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	*Amaranthus spinosus*
Anoda, spurred	*Adoda cristata*
Balloonvine	*Cardiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field	*Convolvulus arvensis*
Bindweed, hedge	*Calystegia sepium*
Broadleaf signalgrass	*Bracharia platyphylia*
Carpetweed	*Mullugo verticillata*
Citron (wild watermelon)	*Citrullus vulgaris*
Cocklebur, common	*Xanthium strumarium*
Copperleaf, hophornbeam	*Acalypha ostryifolia*
Copperleaf, Virginia	*Svs;ufjs bothomovs*
Crabgrass	*Digitaria* spp.
Crotalaria, showy	*Crotolaria spectabilis*
Croton, tropic	*Croton glandulosus*
Cucumber, volunteer	*Cucumis sativas*
Eclipta	*Eclipta prostrate*
Foxtail, giant	*Setaria faberi*
Foxtail, green	*Setaria virdis*
Foxtail, yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry, cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass, seedling	*Sorghum halapense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters, common	*Chenopodium album*
Mexicanweed	*Caperonia castanifolia*
Milkweed, climbing	*Sarcostemma cyanchoides*
Milkweed, honeyvine	*Ampelamus albidus*
Morningglory:	
Cypressvine	*Ipomoea quamoclit*
Entireleaf var.	*Ipomoea hederacea* var. *intergriuscula*

Ivyleaf	*Ipomoea hederacea*
Purple moonflower	*Ipomoea turbinate*
Red (scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (smallwhite)	*Ipomoea lacunose*
Tall (common)	*Impmoea purpurea*
Palmleaf (willowleaf)	*Impmoea wrightii*
Mustard, wild	*Sinapis arvensis*
COMMON NAME	**SCIENTIFIC NAME**
Nightshade, black	*Solanum nigrum*
Nightshade, Eastern black	*Solanum ptychanthum*
Nightshade, hairy	*Solanum physalifolium*
Nutsedge, yellow	*Cyperus esculentus*
Panicum, fall	*Panicum dichotomiflorum*
Panicum, Texas	*Panicum texanum*
Pigweed:	
Amaranth, Palmer	*Amaranthus palmeri*
Amaranth, spiny	
Redroot	*Amaranthus retroflexus*
Smooth	*Amaranthus hybridus*
Poinsettia, wild	*Euphorbia heterophylla*
Purslane, common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Ragweed, common	*Ambrosia artemisifolia*
Ragweed, Giant	*Ambrosia trifida*
Redweed	*Melchia corchorifolia*
Sesbania, hemp	*Sesbania exaltata*
Sicklepod	*Senna obtusifolia*
Sida, prickly	*Sida spinosa*
Signalgrass, broadleaf	*Bracharia platyphylia*
Smartweed, Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Spurge, prostrate	*Chamaesyce humistrata*
Spurge, spotted	*Chamaesyce maculate*
Starbur, bristly	*Acanthospermum hispidum*
Sunflower, common	*Helianthus annuus*
Trumpetcreeper	*Campis redicans*
Velvetleaf	*Abutilon theophrasti*
Venice mallow	*Hibiscus trionum*
Waterhemp, common	*Amaranthus rudis*
Waterhemp, tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Prohibitions
Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage
Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling for Containers Less than 5 Gallons
Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Container Handling for Bulk and Mini-Bulk Containers
Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application or rinsate collection system. Repeat this rinsing procedure 2 more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities. If the container is damaged, leaking or obsolete, contact Orion Fomes, LLC at 480-218-4289.
CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES, LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No

agent of Orion Fomes, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION FOMES LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ORION FOMES LLC's ELECTION, THE REPLACEMENT OF PRODUCT.

PRIA DUE DATE: 9/12/11 # 87655-G

Note to: File 8/29/11
From: Michael Walsh, RD/Herbicide Branch, Tel: 308-2972
Re: New Product Registration, R301. UNCONDITIONAL REGISTRATION.
Product Name: Fomesafen 1.88 Herbicide
Active Ingredients: Fomesafen Salt at 22.1%
EPA Registration Number: 87655-3 (-G)
Submission Dates: April 14, 2011
Decision Number: 448103

Action

- Registration of new fomesafen herbicide for weed control in soybeans.
- Cited Product - The registrant's application cited 100-1101 as a similar product.

Acute Toxicology Reviews (E. McAndrew, August 10, 2011)

- The review determined that this new product is similar to the cited product (100-1101).
- Minor revisions required for Precautionary Statements. Some optional text on proposed label.

Chemistry Reviews (A. Abramovitch, May 9, 2011)

- The Basic CSF revised twice and dated July 27, 2011 is acceptable.
- The data is acceptable.
- The review determined that this new product is similar to the cited product (100-1017), though there are differences in the formulation.

Label Review

- RED - No RED for the active ingredient is available:
- Tolerance – A soybean tolerance was established by 40 CFR 180.433.
- Comments - Minor changes to the proposed label are required per the Acute Toxicity Review.
- Cited Product – With the exception of minor edits, the proposed label is almost identical to the cited product label (dated December 9, 2010).
- Formulator's Exemption – An FE was referenced in the registrant's cover letter, yet no such document could be located. Robert Hawk/Agent was contacted regarding the absence of the document. The registrant confirmed that no FE was provided.

From: "Robert Hawk" <zaphawk@aol.com>
To: Michael Walsh/DC/USEPA/US@EPA
Date: 08/26/2011 12:34 PM
Subject: RE: 87655-G. Clarification Required. Fomesafen 1.88 Herbicide. Decision 448103.

Dear Mr. Walsh,

The Orion Fomes LLC application was prepared over a period of time, so I must apologize for the confusion. A Formulator's Exemption Statement was not included with the application, nor is one required. The cover letter implies that more than one source of active ingredient is included in multiple CSFs for this product. In fact, it was later decided to include only one source of active ingredient in the CSF, namely the one that was recently registered by Orion Fomes.

Again my apologies.

Robert Hawk

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION (7505P)

DP BARCODE No.: 389462 FILE SYMBOL No.: 87655-G PRODUCT NAME: Fomesafen 1.88 Herbicide
DECISION No.: 448103 PC Code(s): 123802 ACTION CODE: R301 FOOD Use: Yes

SUBJECT: Fomesafen 1.88 Herbicide (sodium salt of fomesafen)

FROM: Akiva Abramovitch, Ph. D.
Product Chemistry Team
Technical Review Branch / Registration Division (7505P)

8/4/11

TO: Michael Walsh/Kathryn Montague, PM 23
Herbicide Branch / Registration Division (7505P)

Company Name: Orion Fomes, LLC
Formulation Type: Liquid Herbicide

INTRODUCTION:

The registrant has submitted an application for the registration of the new end use product "Fomesafen 1.88 Herbicide". In support of the registration application, the registrant has submitted 830 series group A product chemistry data with MRID No.484600-01, and 830 series group B data with MRID No.484600-02. The registrant submitted a CSF for a basic formulation (dated 4/13/2011) which was revised on July 27, 2011 at the Agency's recommendations. The registrant claims that this pending product is substantially similar to product Flexar EPA Reg. No. 100-1101.

This review has been altered subsequent to the contractor's signatures.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient(s): Fomesafen Technical (21.5%). There is a discrepancy in the amount of active product reported in the CSF (21.5% by weight) and the product label (22.1%).

2. Has the registrant claimed substantial similarity to a registered product?

   ]X] Yes;]] No; [ ] NA; if yes give the registration number of the cited product.

   EPA Reg. No: 100-1101 (MRID 484600-01 also lists 2 other products: EPA Reg. No. 66760-94; 83529-25)

3. All of the source materials of the active ingredient are derived from registered sources-]X] Yes [ ] No

4. All inert ingredients have been screened by IIAB (and found to be approved for the proposed labeled uses.

5. Confidential Statement of Formula(s):

   [X] Basic - Dated: 4/13/2011; Re-submitted - Dated:7/27/11

Inert ingredient information may be entitled to confidential treatment

DP BARCODE No.: 389462 FILE SYMBOL No.: 87655-G PRODUCT NAME: Fomesafen 1.88 Herbicide
DECISION No.: 448103 PC Code(s): 123802 ACTION CODE: R301 FOOD Use: Yes

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSF(s) concurs with product label (PR Notice 91-2).
[X] Yes; [ ] No; if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs other ingredient)
[X [Yes; [[No; if not, explain below:

Metallic equivalent: [ ] Yes [[NA
Soluble arsenic: [ ] Yes [[NA
Isomeric ratios: [ ] Yes [ ] NA
Acid Equivalent: [ ] Yes [ ] NA; acid equivalent =

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: [ ] Yes [X[No [ ] NA
Methanol at > 4%: [ ] Yes [X[No [[NA
Sodium nitrate/Sodium nitrite [[Yes [X] No [ ] NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown?
[ ] Yes; [X[No

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?
[[Yes; [ ] No; [X] NA; if not, explain below

d. Label requires an additional Storage and Disposal statement:
[ ] Yes; [X[No; if yes explain below:

7. Group A: Product Chemistry Data

TRB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		A	484600-01
830.1600	Description of materials used to produce the product		X		A	
830.1620	Description of formulation process		X		A	484600-01
830.1670	Discussion on the formation of impurities		X		A	484600-01
830.1750	Certified limits (158.350)	Standard certified limits	X		A	[redacted]
		Proposed Limits				
		Justification for wider limits				
830.1800	Enforcement analytical method		X		A	482656-02 DP379979 Tech Product

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

8. Group B:

Guideline No.	Study Title	Value or Qualitative Description	TRB's Assessment of Data	MRID Nos.
830.6302	Color	Yellow	A	484600-02
830.6303	Physical State	Liquid at 19C°	A	484600-02
830.6304	Odor	Like cooking oil at 19C°	A	484600-02
830.6315	Flammability	Flash point >97°C (207°F)	A	484600-02
830.7000	pH	6.4 (1% w/v aqueous, at 20°C) 6.2 (1% w/w aqueous, at 20°C)	A	484600-02
830.7100	Viscosity	247 cps (#2 spindle/30 rpm/22°C) 254 cps (#2 spindle/60 rpm/22°C)	A	484600-02
830.7300	Density (units)	1.106 g/mL (9.23 lb/gal) at 20°C)	A	484600-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress; U = Upgradeable.

CONCLUSIONS:

The TRB has reviewed the product chemistry data submitted for the proposed end-use product and has concluded that:

1. The proposed CSF for the basic formulation dated 7/27/2011 is acceptable.
2. The data submitted corresponding to guideline 830.1550 (product identity and composition) are acceptable
3. The data submitted corresponding to guidelines 1620 (description of formulation process) and 830.1670 (discussion of formation of impurities) are acceptable.
4. The Group B data submitted corresponding to guidelines 830.6302 (color), 830.6304 (odor), 830.6315 (flammability), 830.7000 (pH), and 830.7100 (viscosity) are acceptable.
5. This product and product EPA Reg. No. 100-1101 are substantially similar except that 100-1101 is more alkaline (basic) and this product uses HCl to adjust the pH to 6.2-6.4

DATA EVALUATION RECORD

FOMESAFEN 1.88 HERBICIDE
(SODIUM SALT OF FOMESAFEN)

STUDY TYPE: **Product Identity and Composition (OPPTS 830.1550)**
Description of Beginning Materials (OPPTS 830.1600)
Description of Production Process (OPPTS 830.1620)
Discussion of Formation of Impurities (OPPTS 830.1670)
Certified Limits (OPPTS 830.1750)

MRIDs 484600-01; 484600-02

Prepared for
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202

Prepared by
Summitec Corporation
9724 Kingston Pike, Suite 602
Knoxville, Tennessee 37922

Task Order No. 3-A-89

Primary Reviewer:
Claudia Troxel, Ph.D.

Signature: Claudia M. Troxel
Date: JUL 25 2011

Secondary Reviewers:
Eric B. Lewis, M.S.

Signature: Eric B. Lewis
Date: JUL 25 2011

Robert Ross, M.S., Program Manager

Signature:
Date: JUL 25 2011

Quality Assurance:
Angie Edmonds, B.S.

Signature:
Date: JUL 25 2011

Disclaimer

This review may have been altered subsequent to the contractor's signatures above.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND
POLLUTION PREVENTION

TECHNICAL REVIEW BRANCH
SIMILARITY CLINIC DETERMINATION

10/AUG/2011

MEMORANDUM

Subject:	Name of Pesticide Product:	Fomesafen 1.88 Herbicide
	EPA Reg. No./File Symbol:	87655-G
	DP Barcode:	D389463
	Decision No:	448103
	PC Code :	123802 (sodium salt of fomesafen)
From:	Eugenia McAndrew, Biologist Technical Review Branch Registration Division (7505P)	E. McAndrew T. L. Toxicology
To:	Michael Walsh, PM Team 23 Herbicide Branch Registration Division (7505P)	
Applicant:	Orion Fomes, LLC P.O. Box 21720 Mesa, AZ 85277	

FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt.
Sodium salt of fomesafen	22.1
Other Ingredient(s):	77.9
Total:	100.0%

ACTION REQUESTED: The Risk Manager requests: "Please review the attached material for new product registration 87655-G. The registrant is claiming similarity to 100-1101."

BACKGROUND: Orion Fomes, LLC has applied for registration of Fomesafen 1.88 Herbicide, EPA File Symbol 87655-G, claiming similarity to Flexstar Herbicide, EPA Reg. No. 100-1101. The active ingredient in both products is 22.1% sodium salt of fomesafen. The registrant is using the selective method of data support to satisfy the acute toxicity data requirements. A data matrix dated July 18, 2011 citing acute toxicity studies with MRIDs 440301-01 to -06 is provided. The submission also includes a basic CSF dated April 13, 2011, a label and a company letter.

A search of the OPP electronic databases shows that the cited acute toxicity studies were submitted to support the registration of the cited product, 100-1011 (transferred from 10182-418). These studies were reviewed and classified as acceptable in a Registration Support Branch memo (Ritter; D227186; 30/OCT/1996).

RECOMMENDATIONS:

1. TRB compared the formulations of the proposed product, 87655-G, and the cited product, 100-1101, and determined that the two products are substantially similar.

2. The acute toxicity profile for Fomesafen 1.88 Herbicide, EPA File Symbol 87655-G, is as follows:

acute oral toxicity	III	cited	MRID 44030101
acute dermal toxicity	III	cited	MRID 44030102
acute inhalation toxicity	IV	cited	MRID 44030103
primary eye irritation	III	cited	MRID 44030104
primary skin irritation	II	cited	MRID 44030105
dermal sensitization	sensitizer	cited	MRID 44030106

3. This memorandum pertains only to the decision concerning whether the subject product is similar to the cited product from an acute toxicological view point. For the purposes of this action, TRB has made no further determination of the adequacy of the toxicological data base or the precautionary label of the cited product.

4. The proposed basic CSF submitted for 87655-G must be accepted by the TRB Product Chemistry Team.

LABELING: Based on the toxicity profile above, the following are the precautionary and first aid statements for this product as obtained from the Label Review System:

PRODUCT ID #: 087655-00003

PRODUCT NAME: Fomesafen 1.88 Herbicide

PRECAUTIONARY STATEMENTS

SIGNAL WORD: WARNING

SPANISH SIGNAL WORD: AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Hazards to Humans and Domestic Animals:

Causes skin irritation. Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Do not get on skin or on clothing. Avoid contact with eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Wear coveralls over short-sleeved shirt and short pants. Wear chemical-resistant footwear, socks and chemical-resistant gloves (such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, Viton, Selection Category E). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. [Wear protective eyewear.]*

*[Protective eyewear may be specified, if appropriate.]

Follow the manufacturer\'s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. When mixing, loading and cleaning equipment wear a chemical resistant apron

First Aid:

If on skin:
-Take off contaminated clothing.
-Rinse skin immediately with plenty of water for 15-20 minutes.
-Call a poison control center or doctor for treatment advice.

If swallowed:
-Call a poison control center or doctor immediately for treatment advice.
-Have person sip a glass of water if able to swallow.
-Do not induce vomiting unless told to by a poison control center or doctor.
-Do not give anything by mouth to an unconscious person.

If in eyes:
-Hold eye open and rinse slowly and gently with water for 15-20 minutes.
-Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
-Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

Print Form

Please read instructions on reverse before completing form. Form Approved. O...d No. 2070-0060. Approval expires 2-28

United States
Environmental Protection Agency
Washington, DC 20460

[X] Registration
[ ] Amendment
[ ] Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
87655-35 G	K. Montague	[ ] None [X] Restricted
4. Company/Product (Name)	**PM#**	
Fomesafen 1.88 Herbicide	23	

5. Name and Address of Applicant *(Include ZIP Code)*

Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

[X] *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. 100-110I

Product Name Flextar

Section - II

[ ] Amendment - Explain below.
[ ] Resubmission in response to Agency letter dated _____
[ ] Notification - Explain below.
[ ] Final printed labels in ropsonse to Agency letter dated _____
[ ] "Me Too" Application.
[X] Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

This is a registration application for a new end-use product that is substantially similar to other registered products.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
[ ] Yes [X] No	[ ] Yes [X] No	[ ] Yes [ ] Text No	[ ] Metal [X] Plastic [ ] Glass [ ] Paper [ ] Other (Specify)
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
[X] Label [ ] Container	2.5 gal	[ ] On Label [X] On Labeling accompaning product

6. Manner in Which Label is Affixed to Product [ ] Lithograph [ ] Paper glued [ ] Stenciled [X] Other plastic sleeve

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Robert Hawk	Agent	928-342-3489

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title	4. Typed Name	5. Date
Robert Hawk	Agent	Robert Hawk	4/14/2011

EPA Form 8570-1 (Rev. 3-94) Previous editions are obsolete White - EPA File Copy (original) Yellow - Applicant Co

April 14, 2011

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 1.88 Herbicide (87655-x): Registration Application

Orion Fomes, LLC wishes to apply for the registration of a new end-use product, Fomesafen 1.88 Herbicide. In support of this application we have enclosed the following:

Application for Pesticide Registration (8570-1)
Confidential Statement of Formula (8570-4)
Formulator's Exemption (8570-27)
Certification with Respect to Citation of Data (8570-34)
Data Matrix (8570-35)
Proposed label (6 copies)
Supporting studies (3 copies, with Data Transmittal Document)

One of the sources of technical material in this formulation is not registered at this time. However, we anticipate that it will be registered well before the PRIA approval date for this registration application.

We have concluded that this regulatory action falls in PRIA II Category R301, for which a fee of $1,720 is required. Please find proof of payment enclosed.

Please contact me if you have any questions.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

DATA TRANSMITTAL DOCUMENT

Name and Address of Submitter
Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

Regulatory Action in Support of Which This Package is Submitted
Application for Pesticide Registration
Fomesafen 1.88 Herbicide, EPA File Symbol 87655-x

Transmittal Date
April 14, 2011

List of Submitted Studies (3 Copies)

48460001 R. Hawk, "Fomesafen 1.88 Herbicide: Product Identity, Description of Materials, Manufacturing Process, Discussion of Impurities and Certification of Limits," Report OF1104C (April 13, 2011), 62 pages, OPPTS 830.1550, 830.1600, 830.1620, 830.1670 and 830.1750

48460002 J. Zitomer, "Fomesafen Sodium Salt 22.1%, Group B: Physical Properties Test Guidelines – Color, Physical State, Odor, Flammability (Flashpoint), pH, Viscosity and Density," Report R11-4 (April 1, 2011), 14 pages, OPPTS 830.6302, 830.6303, 830.6304, 830.6315, 830.7000, 830.7100 and 830.7300

Company Official: Robert Hawk, Agent Signature: Robert Hawk
Company Name: Orion Fomes, LLC
Company Contact: Robert Hawk
zaphawk@aol.com
telephone (928) 942-3489

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 1200 Pennsylvania Avenue, N.W. WASHINGTON, D.C. 20460

Certification with Respect to Citation of Data

Applicant's/Registrant's Name, Address, and Telephone Number Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	EPA Registration Number/File Symbol 87655-x
Active Ingredient(s) and/or representative test compound(s) fomesafen	Date 04/13/2011
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) terrestrial crop use	Product Name Fomesafen 1.88 Herbicide

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose). ☐

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose). ☐	I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used). ☒

SECTION II: GENERAL OFFER TO PAY

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements] I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA. ☒

SECTION III: CERTIFICATION

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses .

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature	Date	Typed or Printed Name and Title
Robert Hawk	04/13/2011	Robert Hawk, Agent

Form Approved OMB Nos. 2070-0060; 2070-0057; 2070-0107; 2070-0122; 2070-0164

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-x	Page 1 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 1.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	product identification and disclosure of ingredients	NEW	Orion Fomes, LLC	OWN	
830.1600	description of beginning materials	NEW	Orion Fomes, LLC	OWN	
830.1620	description of manufacturing process	NEW	Orion Fomes, LLC	OWN	
830.1670	discussion of formation of impurities	NEW	Orion Fomes, LLC	OWN	
830.1700	preliminary analysis		not applicable; not an MUP		
830.1750	certification of limits	NEW	Orion Fomes, LLC	OWN	
830.1800	enforcement analytical method	48109402	Orion Fomes, LLC	OWN	
830.6302	color	NEW	Orion Fomes, LLC	OWN	
830.6303	physical state	NEW	Orion Fomes, LLC	OWN	
830.6304	odor	NEW	Orion Fomes, LLC	OWN	
830.6313	stability to normal and elevated temperatures		not applicable; not an MUP		
830.6314	oxidation / reduction: chemical incompatibility	47549301	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.6315	flammability	NEW	Orion Fomes, LLC	OWN	

Signature:	Name and Title: Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/13/2011

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-x	Page 2 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 1.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6316	explodability		not applicable; not potentially explosive		
830.6317	storage stability	47900501	Sharda USA LLC	PAY	in progress
630.6319	miscibllity		not applicable; not an emulsifiable liquid		
830.6320	corrosion characteristics	47900501	Sharda USA LLC	PAY	in progress
830.6321	dielactric breakdown voltage		not applicable; not intended for indoor use		
830.7000	pH	NEW	Orion Fomes, LLC	OWN	
830.7050	UV / visible absorption	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7100	viscosity	NEW	Orion Fomes, LLC	OWN	
830.7200	melting point		not applicabible; not a solid	PAY	
830.7220	boiling point		not applicable; not an MUP		
830.7300	density / relative density	NEW	Orion Fomes, LLC	OWN	
830.7370	dissociation constant in water	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7570	octanol / water partition coefficient	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	

Signature Robert Hawk	Name and Title: Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/13/2011

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-x	Page 3 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 1.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7840	water solubility	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
830.7860	water solubility	see 830.7840			
830.7950	vapor pressure	47409105	Sharda Worldwide Exports Pvt., Ltd.	PAY	
870.1100	acute oral toxicity	47482503	Cheminova, Inc.	PAY	
870.1200	acute dermal toxicity	47482504	Cheminova, Inc.	PAY	
870.1300	acute inhalation toxicity	47482505	Cheminova, Inc.	PAY	
870.2400	acute eye irritation	47482506	Cheminova, Inc.	PAY	
870.2500	acute dermal irritation	47482507	Cheminova, Inc.	PAY	
870.2600	skin sensitization	47482508	Cheminova, Inc.	PAY	

Signature	Name and Title:	Date:
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	4/13/2011

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 4/t3/20t1	EPA Reg. No./File Symbol 87655-x	Page 4 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen t.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Syngenta Crop Protection, Inc.	PAY	
			Spray Drift Task Force	PAY	
			Cheminova, Inc.	PAY	
			Outdoor Residential Exposure Task Force	PAY	
Series 875: cite-all	Toxicology: generic data		Agricultural Reentry Task Force	PAY	
Series 8t0: cite-all	Product Performance: generic data		FIFRA Endangered Species Task Force	PAY	
Series 835: cite-all	Fate, Transport and Transformation: generic data		Agricultural Handlers Exposure Task Force	PAY	
Series 840: cite-all	Spray Drift: generic data	multiple	Sharda Worldwide Exports Pvt., Ltd	PAY	
Series 850: cite-all	Ecological Effects: generic data		Sharda USA LLC	PAY	
Series 860: cite-all	Residue Chemistry: generic data				
Series 875: cite-all	Occupational and Residential Exposure: generic data				

Signature	Name and Title:	Date:
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/13/20t1

April 14, 2011

Document Processing Desk (APPL)
Office of Pesticide Programs (P7504C)
Environmental Protection Agency
Room S-4900, One Potomac Yard (South Building)
2777 S. Crystal Drive
Arlington, VA 22202

Attn: Kathryn Montague (PM 23), Registration Division

Dear Ms. Montague:

Subject: Fomesafen 1.88 Herbicide (87655-x): Registration Application

Orion Fomes, LLC wishes to apply for the registration of a new end-use product, Fomesafen 1.88 Herbicide. In support of this application we have enclosed the following:

- Application for Pesticide Registration (8570-1)
- Confidential Statement of Formula (8570-4)
- Formulator's Exemption (8570-27)
- Certification with Respect to Citation of Data (8570-34)
- Data Matrix (8570-35)
- Proposed label (6 copies)
- Supporting studies (3 copies, with Data Transmittal Document)

One of the sources of technical material in this formulation is not registered at this time. However, we anticipate that it will be registered well before the PRIA approval date for this registration application.

We have concluded that this regulatory action falls in PRIA II Category R301, for which a fee of $1,720 is required. Please find proof of payment enclosed.

Please contact me if you have any questions.

Sincerely,

Robert Hawk

Robert Hawk
Source Dynamics LLC
Agent for Orion Fomes, LLC

P.O. Box 21720, Mesa, Arizona 85277 *tel. 480-218-4289*

DATA TRANSMITTAL DOCUMENT

Name and Address of Submitter
Orion Fomes, LLC
P. O. Box 21720
Mesa, AZ 85277

Regulatory Action in Support of Which This Package is Submitted
Application for Pesticide Registration
Fomesafen 1.88 Herbicide, EPA File Symbol 87655-x

Transmittal Date
April 14, 2011

List of Submitted Studies (3 Copies)

R. Hawk, "Fomesafen 1.88 Herbicide: Product Identity, Description of Materials, Manufacturing Process, Discussion of Impurities and Certification of Limits," Report OF1104C (April 13, 2011), 62 pages, OPPTS 830.1550, 830.1600, 830.1620, 830.1670 and 830.1750

J. Zitomer, "Fomesafen Sodium Salt 22.1%, Group B: Physical Properties Test Guidelines – Color, Physical State, Odor, Flammability (Flashpoint), pH, Viscosity and Density," Report R11-4 (April 1, 2011), 14 pages, OPPTS 830.6302, 830.6303, 830.6304, 830.6315, 830.7000, 830.7100 and 830.7300

Company Official: Robert Hawk, Agent Signature: Robert Hawk
Company Name: Orion Fomes, LLC
Company Contact: Robert Hawk
zaphawk@aol.com
telephone (928) 942-3489

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-x	Page 1 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 1.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	OWN	
			Orion Fomes, LLC	DWN	
			Orion Fomes, LLC	OWN	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not a combustible liquid		

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

Paperwork Reduction Acf Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregisfration and special review activitles, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2f37), U.S. Environmental Protection Agency, 40f M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date 4/f3/20f1	EPA Reg. No./File Symbol 87655-x	Page 2 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 2f720 Mesa, AZ 85277	Product Fomesafen f.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			not applicable; nof potentially explosive		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not an emulsifiable liquid		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not an end-use product		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; not a liquid		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			not applicable; nof a liquid at room temperature		
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	
			Sharda Worldwide Exports Pvt., Ltd.	PAY	

Signature: Robert Hawk	Name and Title: Robert Hawk, Agent, Orion Fomes, LLC	Date: 4/f3/201f

Form Approved OMB No. 2070-0060 **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460**

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date 4/13/2011	EPA Reg. No./File Symbol 87655-x	Page 4 of 4
Applicant's/Registrant's Name & Address Orion Fomes, LLC P. O. Box 21720 Mesa, AZ 85277	Product Fomesafen 1.88 Herbicide	

Ingredient fomesafen

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Syngenta Crop Protection, Inc.	PAY	
			Spray Drift Task Force	PAY	
			Cheminova, Inc.	PAY	
			Outdoor Residential Exposure Task Force	PAY	
			Agricultural Reentry Task Force	PAY	
			FIFRA Endangered Species Task Force	PAY	
			Agricultural Handlers Exposure Task Force	PAY	
			Sharda Worldwide Exports Pvt., Ltd	PAY	
			Sharda USA LLC	PAY	

Signature	Name and Title:	Date: 4/13/2011
Robert Hawk	Robert Hawk, Agent, Orion Fomes, LLC	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 25, 2011

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

ROBERT E. HAWK
SOURCE DYNAMICS LLC
ORION FOMES, LLC
12230 EAST DEL NORTE
YUMA, AZ 85367-7355

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 21-APR-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 22, 2011

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

OPP Decision Number: D-448103
EPA File Symbol or Registration Number: 87655-G
Product Name: FORMESAFEN 1.88 HERBICIDE
EPA Receipt Date: 21-Apr-2011
EPA Company Number: 87655
Company Name: ORION FOMES, LLC

ROBERT E. HAWK
SOURCE DYNAMICS LLC
ORION FOMES, LLC
12230 EAST DEL NORTE
YUMA, AZ 85367-7355

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R301

NEW PRODUCT;IDENTICAL OR SUBSTANTIALLY SIMILAR IN COMPOSITION AND USE TO A REGISTERED PRODUCT;REGISTERED SOURCE OF ACTIVE INGREDIENT;SELECTIVE DATA CITATION ONLY FOR DATA ON PRODUCT CHEMISTRY / ACUTE TOXICITY / PUBLIC HEALTH PEST EFFICACY, WHERE APPLICANT DOES NOT OWN ALL REQUIRED DATA NOR HAS AUTHORIZATION LETTER FROM DATA OWNER;

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely,
Front End Processing Staff

Robert Hawk

From: paygovadmin@mail.doc.twai.gov
Sent: Thursday, April 14, 2011 9:06 AM
To: rhawk@solerasd.com
Subject: Pay.Gov Payment Confirmation

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.

Your transaction has been successfully completed.

Transaction Summary

Application Name: PRIA Service Fees
Pay.gov Tracking ID: 2533N1NO
Agency Tracking ID: 74192750329
Transaction Type: Sale
Transaction Date: Apr 14, 2011 12:05:53 PM

Account Holder Name: Terry K Stojic
Transaction Amount: $1,720.00
Billing Address: 7364 E Red Hawk Street
City: mesa
State/Province: AZ
Zip/Postal Code: 85207
Country: USA
Card Type: Visa
Card Number: **********5264

Decision Number:
Registration Number:
Company Name: source Dynamics, LLC
Company Number: 82542
Action Code: R301

Pages 104-109 *Inert ingredient information may be entitled to confidential treatment*